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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,617	11/18/2003	David W. Williams	LT10037 CIP	4853
25235	7590	03/25/2005	EXAMINER	
HOGAN & HARTSON LLP ONE TABOR CENTER, SUITE 1500 1200 SEVENTEENTH ST DENVER, CO 80202			CHERRY, STEPHEN J	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/715,617	WILLIAMS ET AL.	
	Examiner	Art Unit	
	Stephen J. Cherry	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11,13,14,16,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 12,15 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11,18,03, 3/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1-20 of this application. Claims recite an enforcement window adjacent to sign or signal, however this feature is not disclosed in the previous applications.

Specification

The disclosure is objected to because of the following informalities:

1. Applicant is requested to update the specification with regard to the parent application status ("now U.S. Patent 6,681,195").

Appropriate correction is required.

Drawings

The drawings are objected to because in figure 1, two arrows are depicted entering and leaving block 170, but they are not labeled and do not point to another block. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

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number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 7, 9-11, 13-14 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,938,717 to Dunne et al in view of U.S. Patent 6,100,819 to White.

The claims recite, as disclosed by Dunne:

a laser-based speed detector determining a speed of a vehicle and in response ('717, fig. 3, 38), generating a speed signal ('717, fig. 3, 46); a

camera aligned with the speed detector capturing and storing an image of the vehicle, wherein the camera is adapted for operating in response to an image capture signal ('717, fig. 3, 40, and fig. 7, 147, and fig. 2); and a portable field processor communicatively linked with the speed detector and the camera, wherein the portable field processor receives the speed signal from the speed detector ('717, fig. 3, 10), compares the speed signal to a capture speed threshold, and when the threshold is determined to be exceeded, transmits the image capture signal to the camera ('717, fig. 7, 147-154);

wherein the image is a digital-format still image of the vehicle stored by the camera in camera memory, wherein the camera responds to the image capture signal to generate and transmit a digital image file including the digital-format still image to the portable field processor, and wherein the portable field processor operates to create a combined speed and image data file by modifying the digital image file to include speed data from the speed signal ('717, fig. 2 and col. 5, line 30)

wherein the processor includes an input device receiving the capture speed threshold as inputted by an operator ('717, col. 5, line 44); wherein the camera continuously captures and stores images including one image per image timing cycle, and wherein the portable field processor synchronizes operation of the detector and the camera by transmitting the image capture signal within the image timing cycle in

which the one image is the capture image of the vehicle ('717, fig. 3 and col. 7, line 12).

operating the camera on an ongoing basis to capture still images of vehicles passing through the enforcement window and to store the still images at least temporarily in memory ('717, fig. 2); determining the speed of a targeted vehicle in the enforcement window with the speed detector ('717, fig. 2, "speed"); transmitting the speed from the speed detector to a portable field processor ('717, fig. 3, 46 and 57); processing the speed with the portable field processor to determine whether a capture speed threshold has been exceeded and when determined exceeded ('717, fig. 7, 149), transmitting a trigger signal to the camera; and at the camera, receiving the trigger signal ('717, col. 7, line 12), retrieving a still image corresponding to the targeted vehicle from memory, and transmitting the still image in a digital image file to the portable field processor ('717, fig. 2).

further including processing the digital image file with the portable field processor to insert or link the speed ('717, fig. 2, "speed"); further including displaying the processed digital image file on a display of the portable field processor ('717, fig. 4, 100 and 106 and col. 10, line 28);

further including prior to the operating and determining, entering traffic sign or signal enforcement parameters including the capture speed threshold ('717, col. 5, line 44).

further including operating the portable field processor to create a combined digital image file by writing select portions of the traffic sign or signal enforcement parameters including the speed into the digital image file ('717, fig. 2, "speed").

means for determining a speed of a vehicle, generating a speed signal, wherein the speed determining means comprises a laser-based speed detector ('717, fig. 3, 38);

means aligned with the speed determining means for capturing and storing a video image of the vehicle for a measurement window, wherein the video image means is adapted for operating in response to an image capture signal ('717, fig. 3, 40); and
processing means communicatively linked with the speed determining means and the video image means for receiving the speed signal, comparing the speed signal to a capture speed threshold, determining when the threshold is exceeded, and transmitting the image capture signal to the video image means ('717, fig. 3, 10);

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wherein the processing means further generates speed data based on the speed signal and wherein the processing means further matches the speed data with the video image ('717, fig. 2);

wherein the video image comprises a 10 second or shorter video clip of the enforcement window including an image of the vehicle and wherein the video image means responds to the image capture signal to generate and transmit a video image file comprising the video clip to the processing means ('717, col. 4, line 65)

However, Dunne does not disclose operating in an enforcement area near a traffic signal.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the system nearby a traffic signal to reduce the risk to the public without the need for police presence ('819, col. 1, line 15).

Claims 5, 6, 8, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,938,717 to Dunne et al in view of U.S. Patent 6,100,819 to White further in view of *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

The claims recite, as disclosed by Dunne:

a laser-based speed detector determining a speed of a vehicle and in response ('717, fig. 3, 38), generating a speed signal ('717, fig. 3, 46); a camera aligned with the speed detector capturing and storing an image of the vehicle, wherein the camera is adapted for operating in response to an image capture signal ('717, fig. 3, 40, and fig. 7, 147, and fig. 2); and a portable field processor communicatively linked with the speed detector and the camera, wherein the portable field processor receives the speed signal from the speed detector ('717, fig. 3, 10), compares the speed signal to a capture speed threshold, and when the threshold is determined to be exceeded, transmits the image capture signal to the camera ('717, fig. 7, 147-154);

wherein the image is a digital-format still image of the vehicle stored by the camera in camera memory, wherein the camera responds to the image capture signal to generate and transmit a digital image file including the digital-format still image to the portable field processor, and wherein the portable field processor operates to create a combined speed and image data file by modifying the digital image file to include speed data from the speed signal ('717, fig. 2 and col. 5, line 30)

wherein the processor includes an input device receiving the capture speed threshold as inputted by an operator ('717, col. 5, line 44); wherein the camera continuously captures and stores images including one image per image timing cycle, and wherein the portable field

processor synchronizes operation of the detector and the camera by transmitting the image capture signal within the image timing cycle in which the one image is the capture image of the vehicle ('717, fig. 3 and col. 7, line 12).

operating the camera on an ongoing basis to capture still images of vehicles passing through the enforcement window and to store the still images at least temporarily in memory ('717, fig. 2); determining the speed of a targeted vehicle in the enforcement window with the speed detector ('717, fig. 2, "speed"); transmitting the speed from the speed detector to a portable field processor ('717, fig. 3, 46 and 57); processing the speed with the portable field processor to determine whether a capture speed threshold has been exceeded and when determined exceeded ('717, fig. 7, 149), transmitting a trigger signal to the camera; and at the camera, receiving the trigger signal ('717, col. 7, line 12), retrieving a still image corresponding to the targeted vehicle from memory, and transmitting the still image in a digital image file to the portable field processor ('717, fig. 2).

further including processing the digital image file with the portable field processor to insert or link the speed ('717, fig. 2, "speed"); further including displaying the processed digital image file on a display of the portable field processor ('717, fig. 4, 100 and 106 and col. 10, line 28);

further including prior to the operating and determining, entering traffic sign or signal enforcement parameters including the capture speed threshold ('717, col. 5, line 44).

further including operating the portable field processor to create a combined digital image file by writing select portions of the traffic sign or signal enforcement parameters including the speed into the digital image file ('717, fig. 2, "speed").

means for determining a speed of a vehicle, generating a speed signal, wherein the speed determining means comprises a laser-based speed detector ('717, fig. 3, 38);

means aligned with the speed determining means for capturing and storing a video image of the vehicle for a measurement window, wherein the video image means is adapted for operating in response to an image capture signal ('717, fig. 3, 40); and

processing means communicatively linked with the speed determining means and the video image means for receiving the speed signal, comparing the speed signal to a capture speed threshold, determining when the threshold is exceeded, and transmitting the image capture signal to the video image means ('717, fig. 3, 10);

wherein the processing means further generates speed data based on the speed signal and wherein the processing means further matches the speed data with the video image ('717, fig. 2);

wherein the video image comprises a 10 second or shorter video clip of the enforcement window including an image of the vehicle and wherein the video image means responds to the image capture signal to generate and transmit a video image file comprising the video clip to the processing means ('717, col. 4, line 65)

However, Dunne does not disclose operating in an enforcement area near a traffic signal and Dunne additionally does not teach:

the capture speed threshold is less than about 30 miles per hour;

wherein the capture speed threshold is selected from the range of about 10 to about 20 miles per hour;

wherein the enforcement window has a front end positioned in a road lane adjacent the sign and about 10 to 20 feet from the sign as measured in the lane away from the sign in a direction opposite traffic flow in the lane;

wherein the capture speed threshold is selected from the range of 10 to 20 miles per hour.

The claim further recites operating the system within the area of a traffic signal, as disclosed by White ("819, fig. 1 and col. 5, line 45). Claims 5, 6, 8, and 16 further recite:

the capture speed threshold is less than about 30 miles per hour;
wherein the capture speed threshold is selected from the range of about 10 to about 20 miles per hour;
wherein the enforcement window has a front end positioned in a road lane adjacent the sign and about 10 to 20 feet from the sign as measured in the lane away from the sign in a direction opposite traffic flow in the lane;
wherein the capture speed threshold is selected from the range of 10 to 20 miles per hour.

Although White does not explicitly disclose the claimed ranges of speeds as the disclosed "excessive speed detection" speed ('819, col. 5, line 63) or the ranges of distance as the system disclosed in '819, fig. 1, one of ordinary skill in the art at the time the invention was made would have determined speeds and distances that have the same properties for enforcement of traffic laws (see MPEP 2144.05 [R-1], I).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the system nearby a traffic signal to reduce the risk to the public without the need for police presence ('819, col. 1, line 15).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,938,717 to Dunne et al in view of U.S. Patent 6,100,819 to White as applied to claim 1-2 above, and further in view of U.S. Patent 6,546,119 to Ciolli et al.

The claims further recite, as disclosed by Ciolli:

wherein the digital image file is a JPEG-format file and the modifying includes inserting the speed data in a header of the JPEG-format file ('119, col. 11, line 60).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the jpeg file of Ciolli with the invention of Dunn in view of White to allow data compression techniques to be used, thereby reducing data storage requirements ('119, col. 11, line 57).

Allowable Subject Matter

Claims 12, 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 12 recites, "further including operating the camera to provide charging power to the portable field processor to protect the speed and the digital image file at the portable field processor". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 15 recites, "wherein the positioning includes performing ranging of the speed detector including first aiming the speed detector at the traffic signal, operating the speed detector to determine a measurement distance from the speed detector to the traffic sign or signal, and second aiming the speed detector at a central portion of the road lane". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 17 recites, "wherein the capture speed threshold is calculated as a percentage of a posted speed limit for the road lane". This feature in combination with the remaining claimed structure avoids the prior art of record.

Conclusion

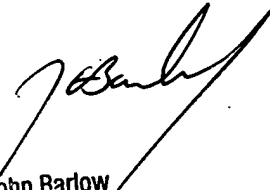
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Cherry whose telephone number is (571) 272-2272. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJC



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